

# Consensus Sequence

Symbol comparison table: blosum62.cmp CompCheck: 6430

Name: <u>hTRADEalpha_1</u>	Len: 423	Check: 4050	Weight: 1.00
Name: <u>hTRAIN_1</u>	Len: 423	Check: 4128	Weight: 1.00
Name: <u>hTRADEbeta_1</u>	Len: 423	Check: 7937	Weight: 1.00
Name: <u>hApo420pep</u>	Len: 423	Check: 8173	Weight: 1.00

```
//
1
hTRADEalpha_1 MALKVLLLEQE KTFFTLLVLL GYLSCKVTCE SGDCRQQEFR DRSQNCVPCN
hTRAIN_1 MALKVLLLEQE KTFFTLLVLL GYLSCKVTCE SGDCRQQEFR DRSQNCVPCN
hTRADEbeta_1 MALKVLLLEQE KTFFTLLVLL GYLSCKVTCE TGDCRQQEFR DRSQNCVPCN
hApo420pep MALKVLLLEQE KTFFTLLVLL GYLSCKVTCE SGDCRQQEFR DRSQNCVPCN
Consensus MALKVLLLEQE KTFFTLLVLL GYLSCKVTCE SGDCRQQEFR DRSQNCVPCN

51
hTRADEalpha_1 QCQPGMELSK ECQFGYGEDA QCVTCRLHFR KEDWGFQKCK PCLDCAVVNR
hTRAIN_1 QCQPGMELSK ECQFGYGEDA QCVTCRLHFR KEDWGFQKCK PCLDCAVVNR
hTRADEbeta_1 QCQPGMELSK ECQFGYGEDA QCVTCRLHFR KEDWGFQKCK PCLDCAVVNR
hApo420pep QCQPGMELSK ECQFGYGEDA QCVTCRLHFR KEDWGFQKCK PCLDCAVVNR
Consensus QCQPGMELSK ECQFGYGEDA QCVTCRLHFR KEDWGFQKCK PCLDCAVVNR

101
hTRADEalpha_1 FQKANC SATS DAICGDCLPG FYRKTCLVGF QDMECVPCGD PPPPYEPHCA
hTRAIN_1 FQKANC SATS DAICGDCLPG FYRKTCLVGF QDMECVPCGD PPPPYEPHCA
hTRADEbeta_1 FQKANC SATS DAICGDCLPG FYRKTCLVGF QDMECVPCGD PPPPYEPHCA
hApo420pep FQKANC SATS DAICGDCLPG FYRKTCLVGF QDMECVPCGD PPPPYEPHCA
Consensus FQKANC SATS DAICGDCLPG FYRKTCLVGF QDMECVPCGD PPPPYEPHCA

151
hTRADEalpha_1 SKVNLVKIAS TASSPRDTAL AAVICSALAT VLLALLILCV IYCKRQFMEK
hTRAIN_1 SKVNLVKIAS TASSPRDTAL AAVICSALAT VLLALLILCV IYCKRQFMEK
hTRADEbeta_1 SKVNLVKIAS TASSPRDTAL AAVICSALAT VLLALLILCV IYCKRQFMEK
hApo420pep SKVNLVKIAS TASSPRDTAL AAVICSALAT VLLALLILCV IYCKRQFMEK
Consensus SKVNLVKIAS TASSPRDTAL AAVICSALAT VLLALLILCV IYCKRQFMEK

201
hTRADEalpha_1 KPSWSLRSQD IQYNGSELSC FDRPQLHEYA HRACCQCRD SVQTCGPFVRL
hTRAIN_1 KPSWSLRSQD IQYNGSELSC FDRPQLHEYA HRACCQCRD SVQTCGPFVRL
hTRADEbeta_1 KPSWSLRSQD IQYNGSELSC LDRPQLHEYA HRACCQCRD SVQTCGPFVRL
hApo420pep KPSWSLRSQD IQYNETELSC FDRPQLHEYA HRACCQCRD SVQTCGPFVRL
Consensus KPSWSLRSQD IQYNGSELSC FDRPQLHEYA HRACCQCRD SVQTCGPFVRL

251
hTRADEalpha_1 LPSMCCEEAC SPNPATLGCG VHSAAASLOAR NAGPAGEMVP TFFGSLTQSI
hTRAIN_1 LPSMCCEEAC SPNPATLGCG VHSAAASLOAR NAGPAGEMVP TFFGSLTQSI
hTRADEbeta_1 LPSMCCEEAC SPNPATLGCG VHSAAASLOAR NAGPAGEMVP TFFGSLTQSI
hApo420pep LPSMCCEEAC SPNPATLGCG VHSAAASLOAR NAGPAGEMVP TFFGSLTQSI
Consensus LPSMCCEEAC SPNPATLGCG VHSAAASLOAR NAGPAGEMVP TFFGSLTQSI
```

Figure 1

301 360

hTRADEalpha_	CG	MONPMGGONI	SFCDSYPFLT	GEDY	LESSTSLDSN
hTRAIN_1	CG	MONPMGGONI	SFCDSYPFLT	GEDY	LESSTSLDSN
hTRADEbeta_1	CGEFSDAWPL	MONPMGGONI	SFCDSYPFLA	GEDIHSLAPE	LESSTSLDSN
hApo420pep	CGEFSDAWPL	MONPMGGONI	SFCDSYPFLT	GEDIHSLAPE	LESSTSLDSN
Consensus	CGEFSDAWPL	MONPMGGONI	SFCDSYPFLT	GEDIHSLAPE	LESSTSLDSN

351 400

hTRADEalpha_	SSQDLVGQAV	PVQSHSENFT	AATDLSRYNN	TLVESASTQD	ALTMRSQLDQ
hTRAIN_1	SSQDLVGQAV	PVQSHSENFT	AATDLSRYNN	TLVESASTQD	ALTMRSQLDQ
hTRADEbeta_1	SSQDLVGQAV	PVQSHSENFT	AATDLSRYNN	TLVESASTQD	ALTMRSQLDQ
hApo420pep	SSQDLVGQAV	PVQSHSENFT	AATDLSRYNN	TLVESASTQD	ALTMRSQLDQ
Consensus	SSQDLVGQAV	PVQSHSENFT	AATDLSRYNN	TLVESASTQD	ALTMRSQLDQ

401 423

hTRADEalpha_	ESGAIHPAT	QTSLQEA---	---
hTRAIN_1	ESGAVIHPAT	QTSLQEA---	---
hTRADEbeta_1	ESGAIHPAT	QTSLQVRQRL	GSL
hApo420pep	ESGAVIHPAT	QTSLQVRQRL	GSL
Consensus	ESGA-IHPAT	QTSLQ--QRL	GSL

Figure 1

TRADE- $\alpha$   
TRADE- $\beta$

ESGAIHPATQTSLQEA  
ESGAIHPATQTSLQVRQLGSL  
401 416 423

Figure 2

## CRD1

NGFR75  
OX40  
CD40  
TRADE

OPTGLYT.H	SCC.	OKC	MLGECVLOSC	..G.AWCTVCE
OCETYP..S	KDKC.	CHC	RPCWCVVSC	..SASQNTVCR
CRKQYL.I	WSCC.	OSTC	QPCQCLVSC	..TSTTETCOL
CRQOEFRDR	SCCQVZCWC	GPCWELSTEC	GFYQEDACCV	

## CRD2

NGFR75  
OX40  
CD40  
TRADE

FOLDSTVTS	DVVSATEROK	SCCQVZCWC	MLGECVLOSC	MSAP...	QVE	ADDVVC
PC..GPGFY	NDVVSATEROK	SCCQVZCWC	MLGECVLOSC	MSAP...	QVE	ADDVVC
POGES.IPL	DVVSATEROK	SCCQVZCWC	MLGECVLOSC	MSAP...	QVE	ADDVVC
TORLHR.VK	EDWCVOK.OK	SCCQVZCWC	MLGECVLOSC	MSAP...	QVE	ADDVVC

Figure 3

SEQ ID NO:2 Human TRADE $\alpha$   
SEQ ID NO:6 Mouse Trade

MAIKVILEQEKTFTLLVLGYHSEKVTESSTCKRQLEFRFHHWPN  
NAISVPLHRTVLGAAILFLHAKVSCETAKRQCHKRRHHNLK

CRD1

SEQ ID NO:2 Human TRADE $\alpha$   
SEQ ID NO:6 Mouse Trade

EGGFGMMLEKEGCGYGEDAQVTORLIRFEEHWEFOKOKPCIDAVIF  
EKKFGMMLEKEGCGYGEDAQVFORIRFEEHWEFOKOKPCIDAVIF

CRD2

SEQ ID NO:2 Human TRADE $\alpha$   
SEQ ID NO:6 Mouse Trade

FORANCEATSDATGGLCLPGFYRFTKINGVOTFMCEVPCGDFPPYEPHCA  
FORANCEATSDATGGLCLPGFYRFTKINGVOTFMCEVPCGDFPPYEPHCA

SEQ ID NO:2 Human TRADE $\alpha$   
SEQ ID NO:6 Mouse Trade

SKVNIKRIASTASSPRDTAAVTCALATVILLALLTLCVITYCKRQFMER  
SKVNIKRIASTASSPRDTAAVTCALATVILLALLTLCVITYCKRQFMER

TM

SEQ ID NO:2 Human TRADE $\alpha$   
SEQ ID NO:6 Mouse Trade

KRWSTLRSDIYNCHEISECTREFOIHEYAHKACCCCRDEVTCTGPRRI  
KRWSTLRSDIYNCHEISECTREFOIRHCAHRAKXKYHRDSAPMYLPHI

SEQ ID NO:2 Human TRADE $\alpha$   
SEQ ID NO:6 Mouse Trade

LEEMCEHCEPNPTTGGVHHAASLCARNAGPACEMVETFFGSLTQRI  
IHELKHHARASARAVLHHLREPTTKEHNPASVEDTMAFLHVSRI

SEQ ID NO:2 Human TRADE $\alpha$   
SEQ ID NO:6 Mouse Trade

NGHPSIAPIAGHIMCEINIEFTDEYHNTGRIHSHHPLLESSTHIN  
KATPHANDHHLHLS-ELDEYHNTGRIHSHHPLLESSTHIN

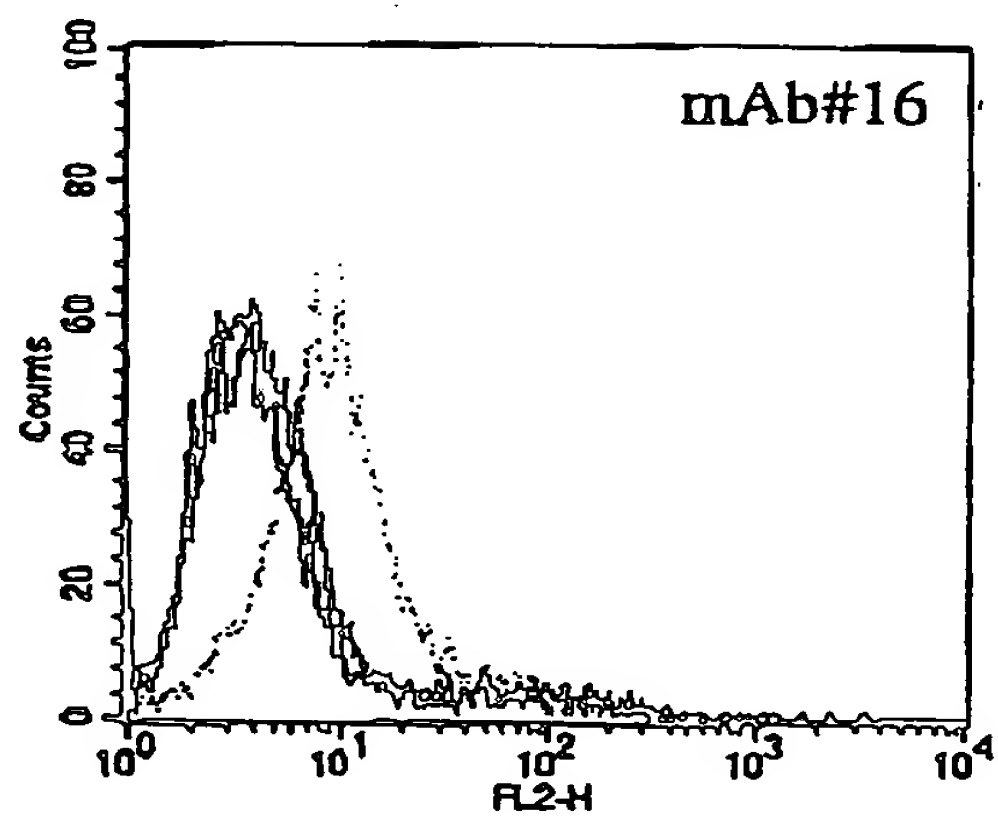
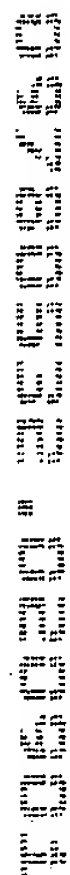
SEQ ID NO:2 Human TRADE $\alpha$   
SEQ ID NO:6 Mouse Trade

SSQIVVSGVPVQEHSENFTAAATDLRYNNTLVEASTHETLTMRHOLDQ  
GGHIAHHALESAGNVSESTDSPRHGDTGVVWQTLAIAQRTPEGGW

SEQ ID NO:2 Human TRADE $\alpha$   
SEQ ID NO:6 Mouse Trade

ESGAVIHPATQTSLEEA 417  
EDRENINLANPTAFLEA 416

Figure 4



### Figure 5

2000 3600 6000 8000 10000 12000 14000 16000

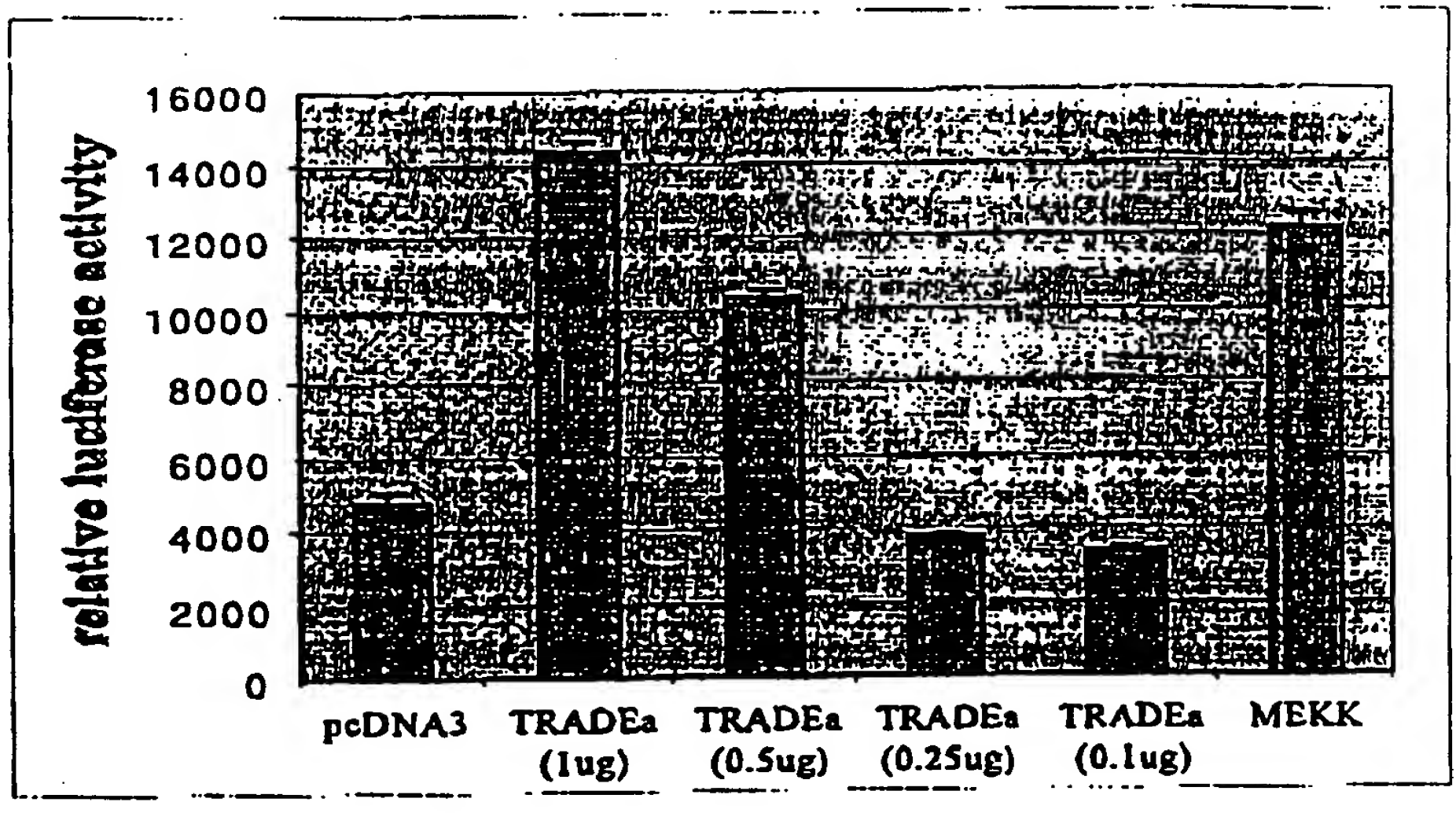
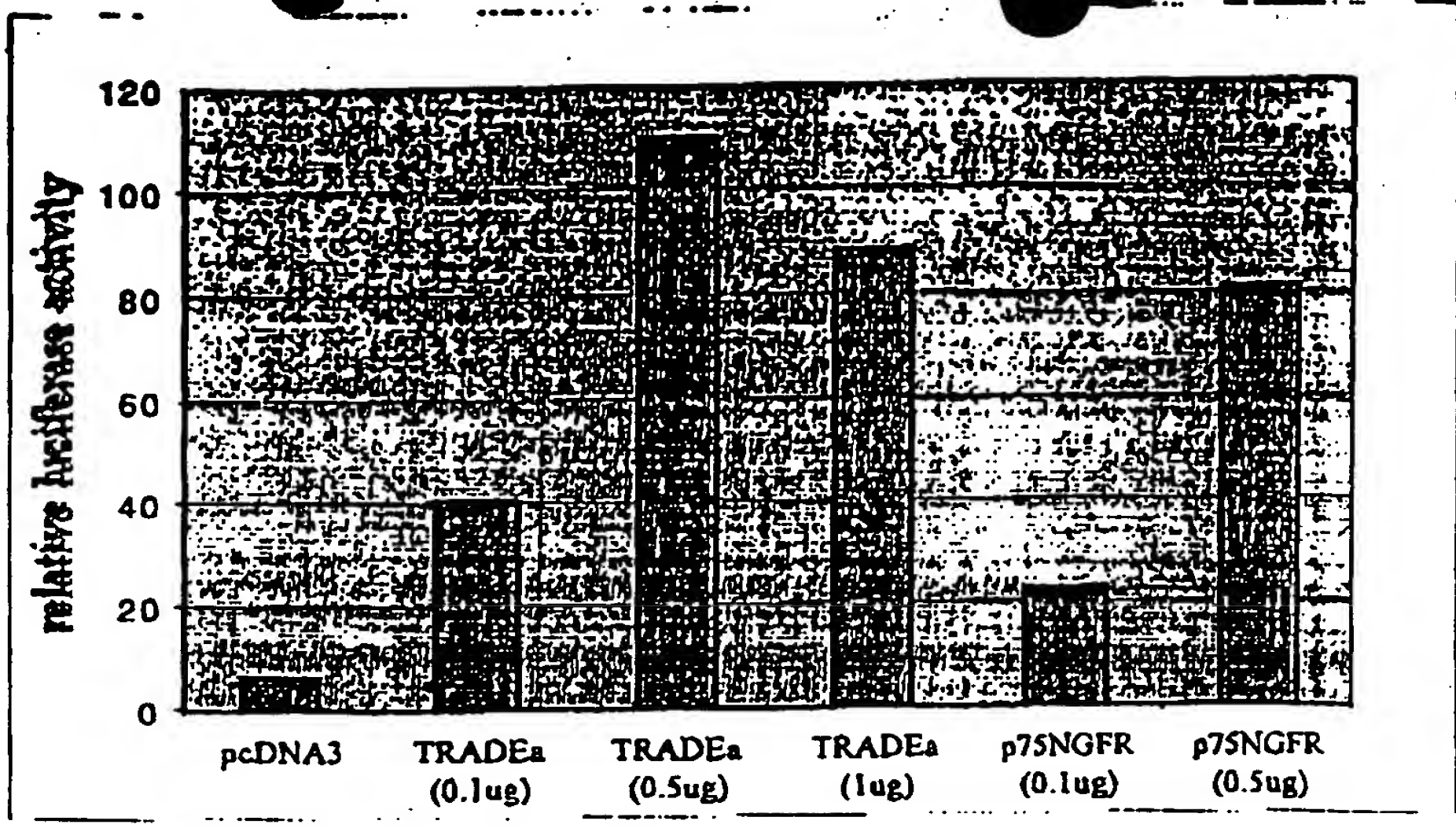


Figure 6



20030603/60

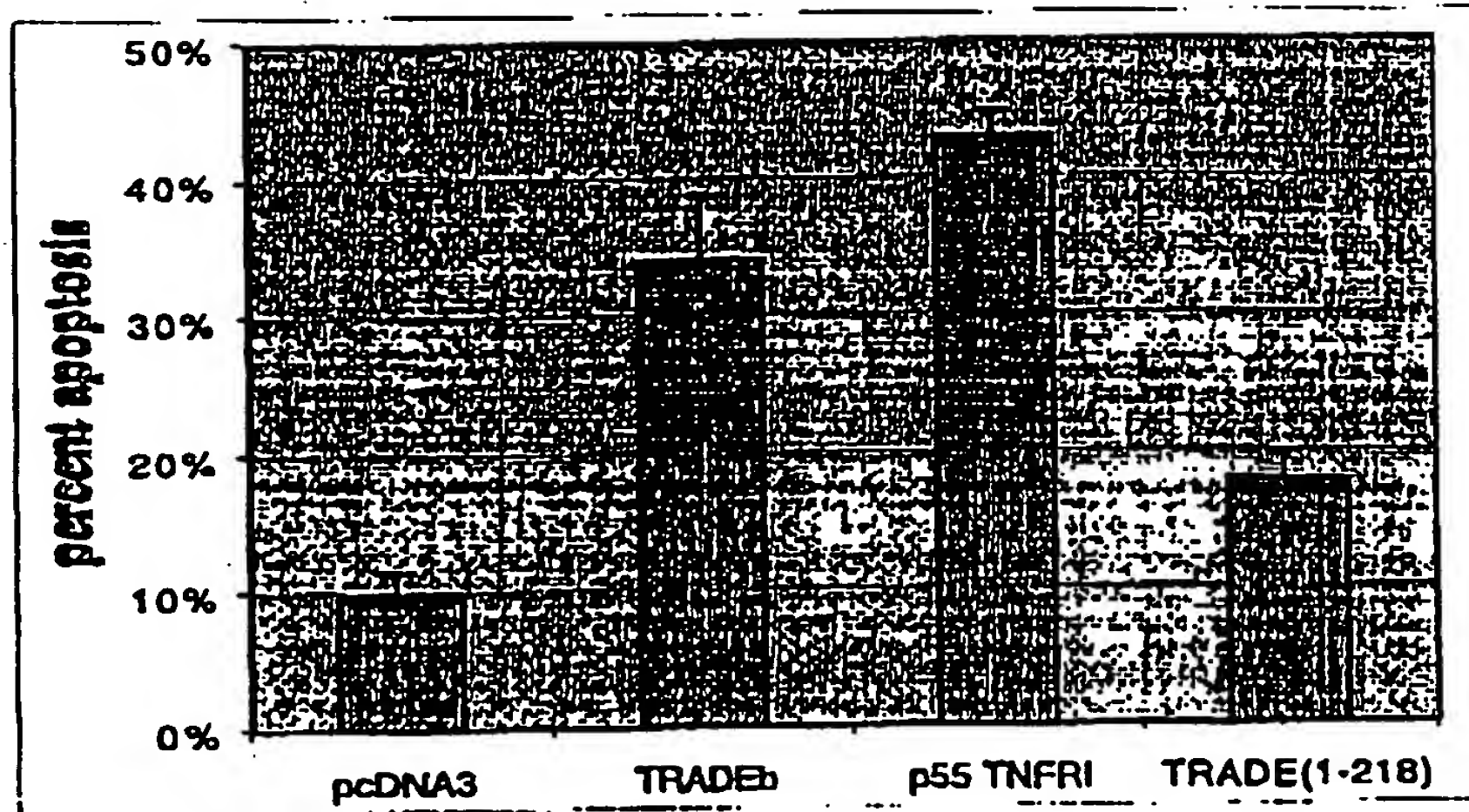
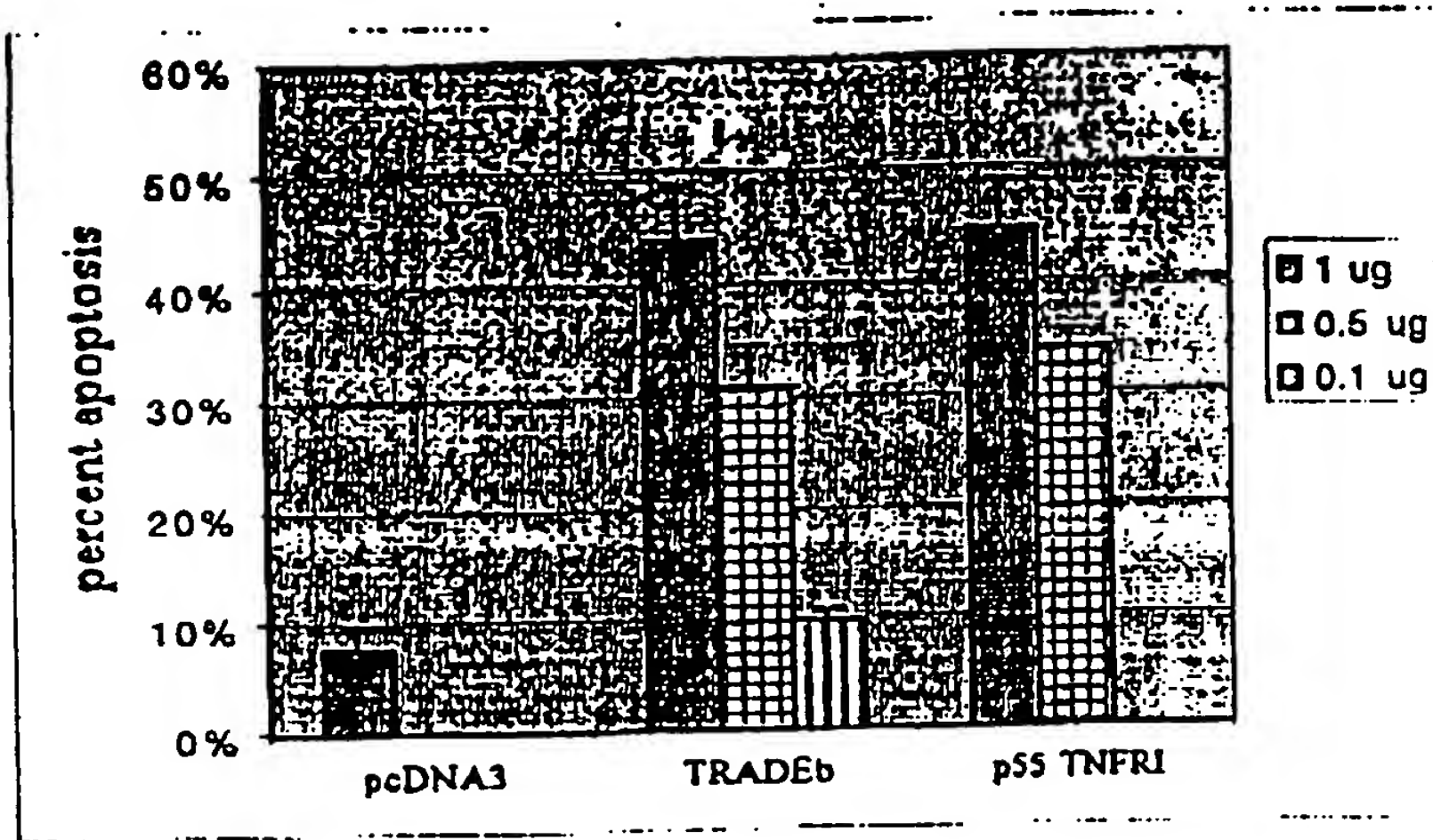


Figure 7



120 70 50 30

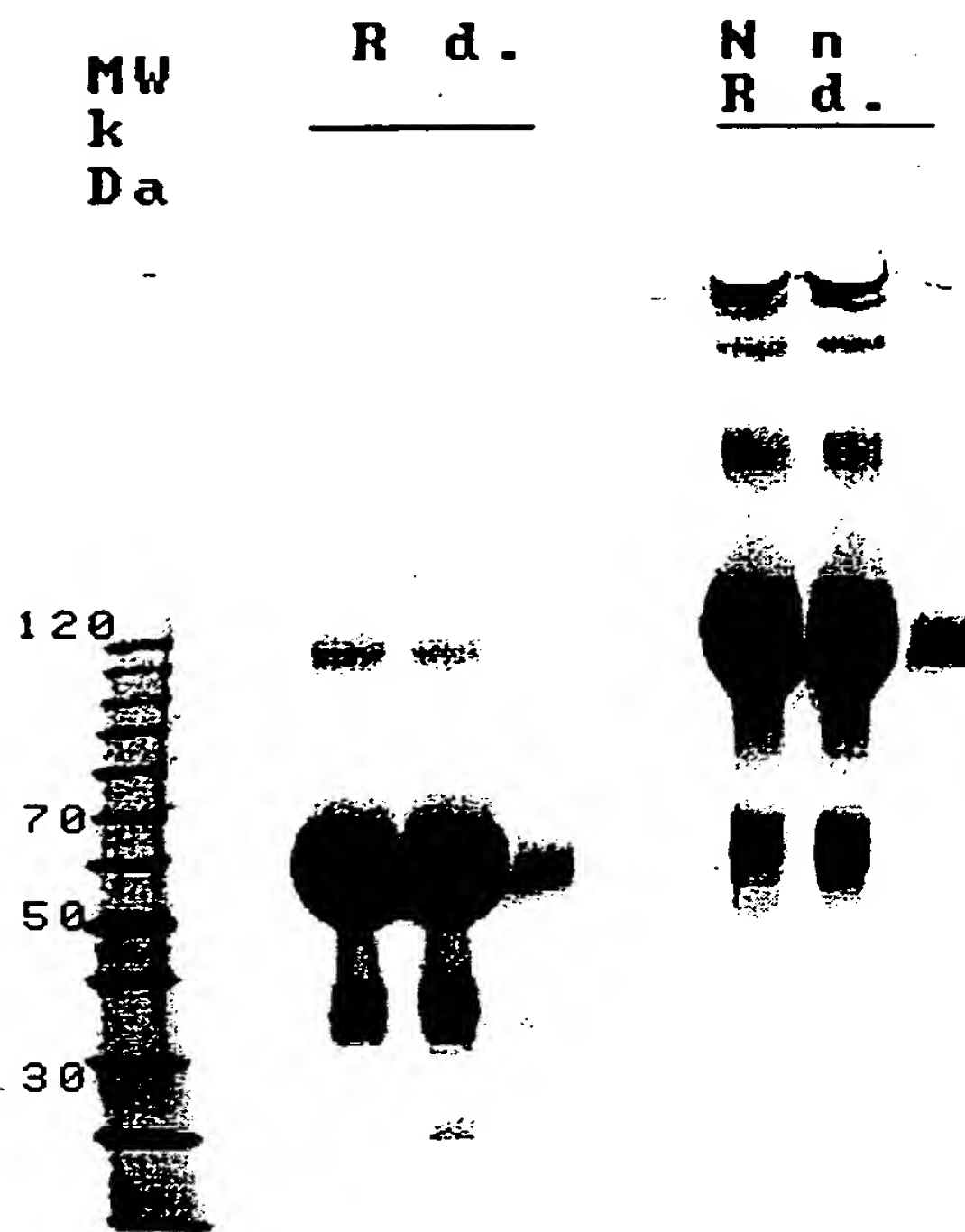
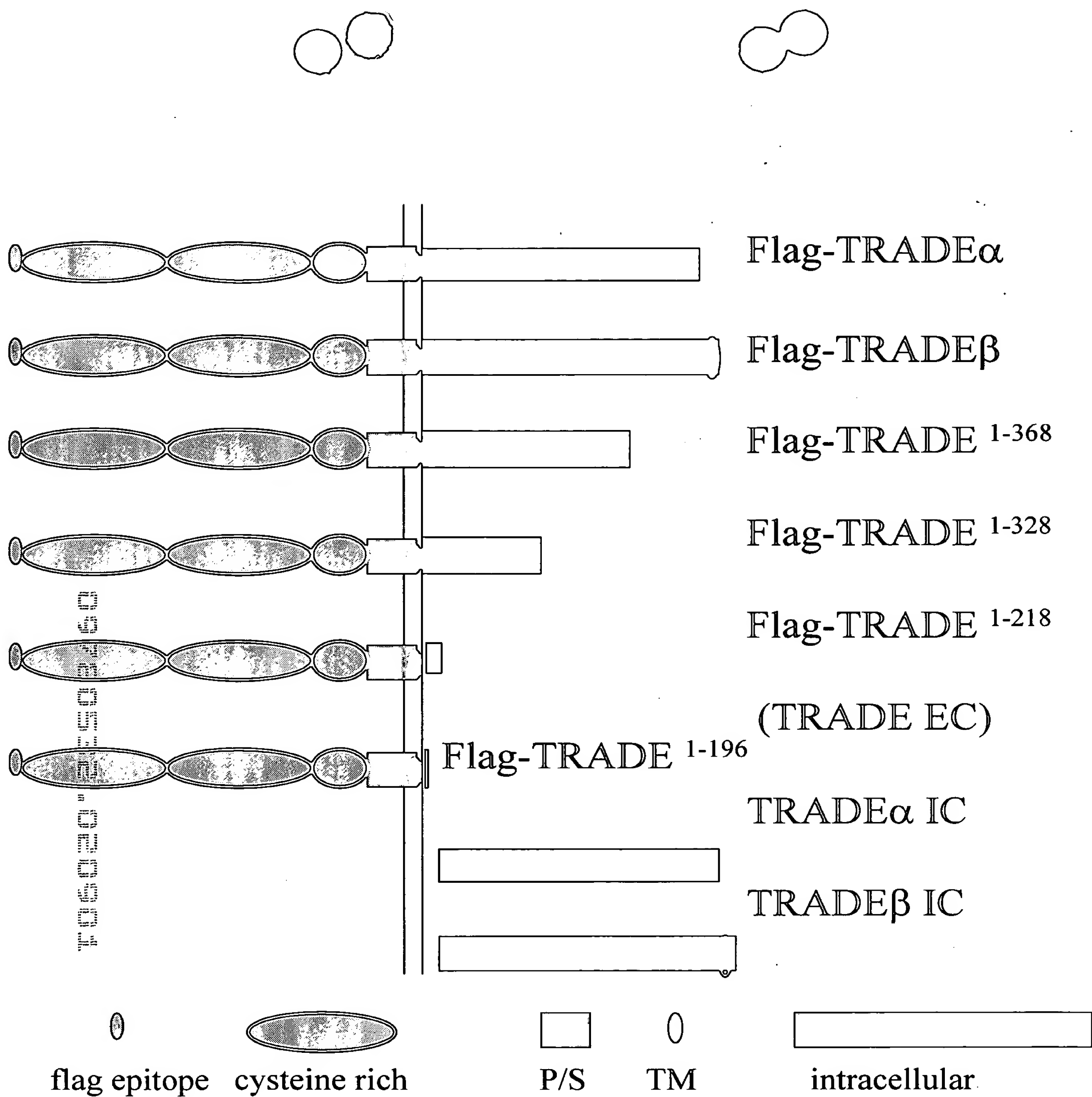


Figure 8



## Deletion analysis

FIGURE 9

10660307 34660307 463

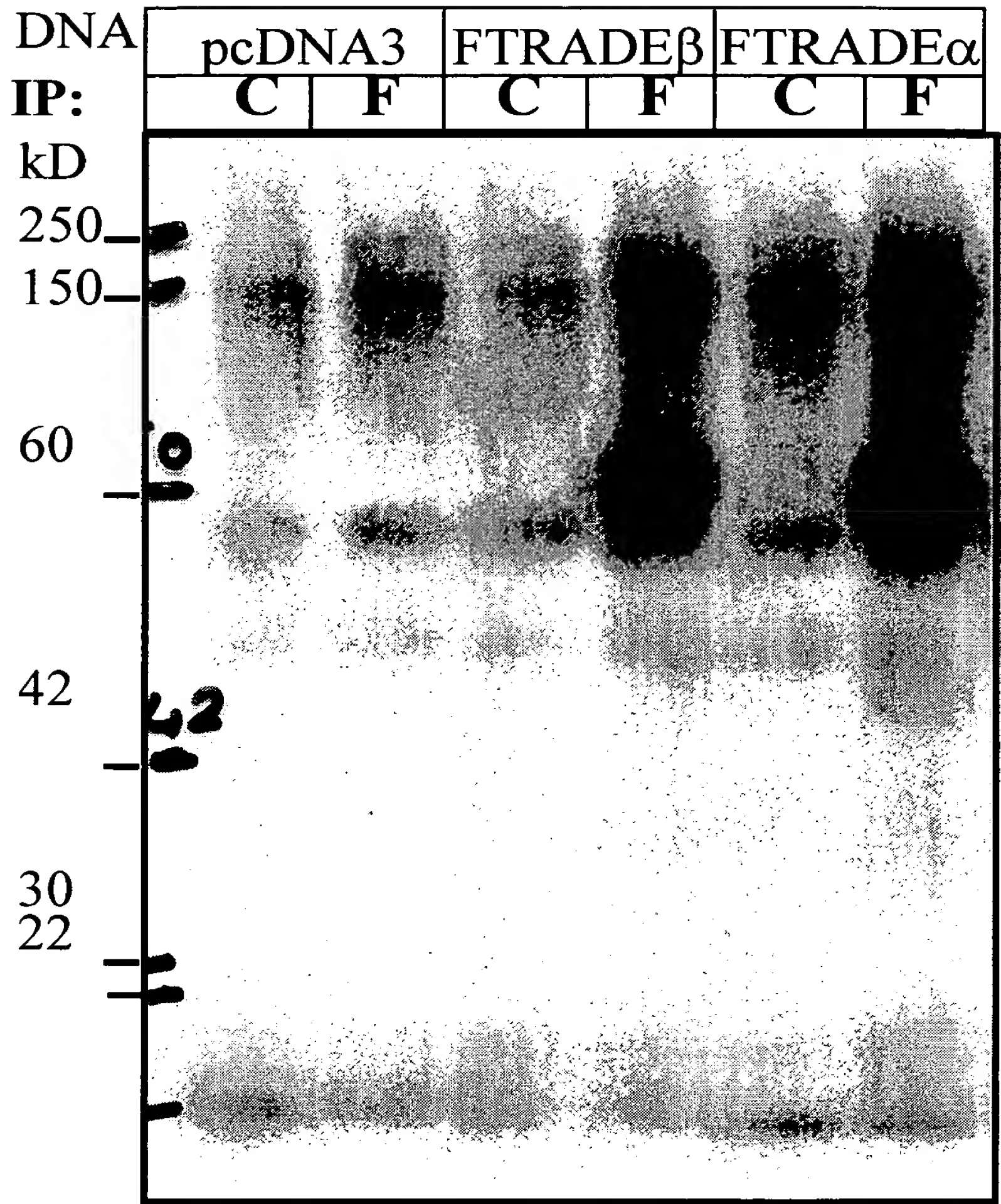
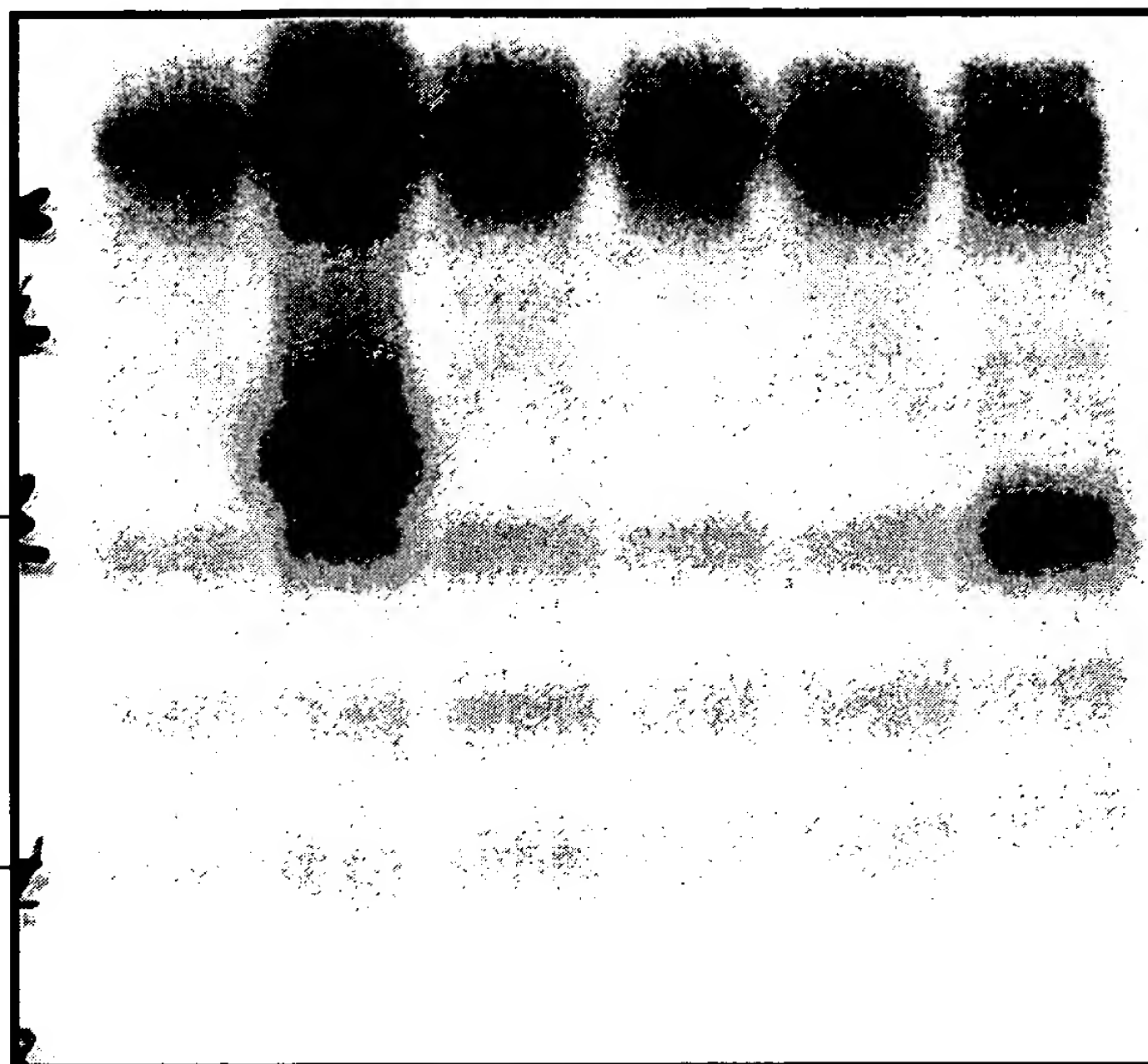


FIGURE 10

A

IP:

F-TRADE $\beta$		F-TRADE <sup>1-328</sup>		F-TRADE <sup>1-368</sup>	
C	F	C	F	C	F

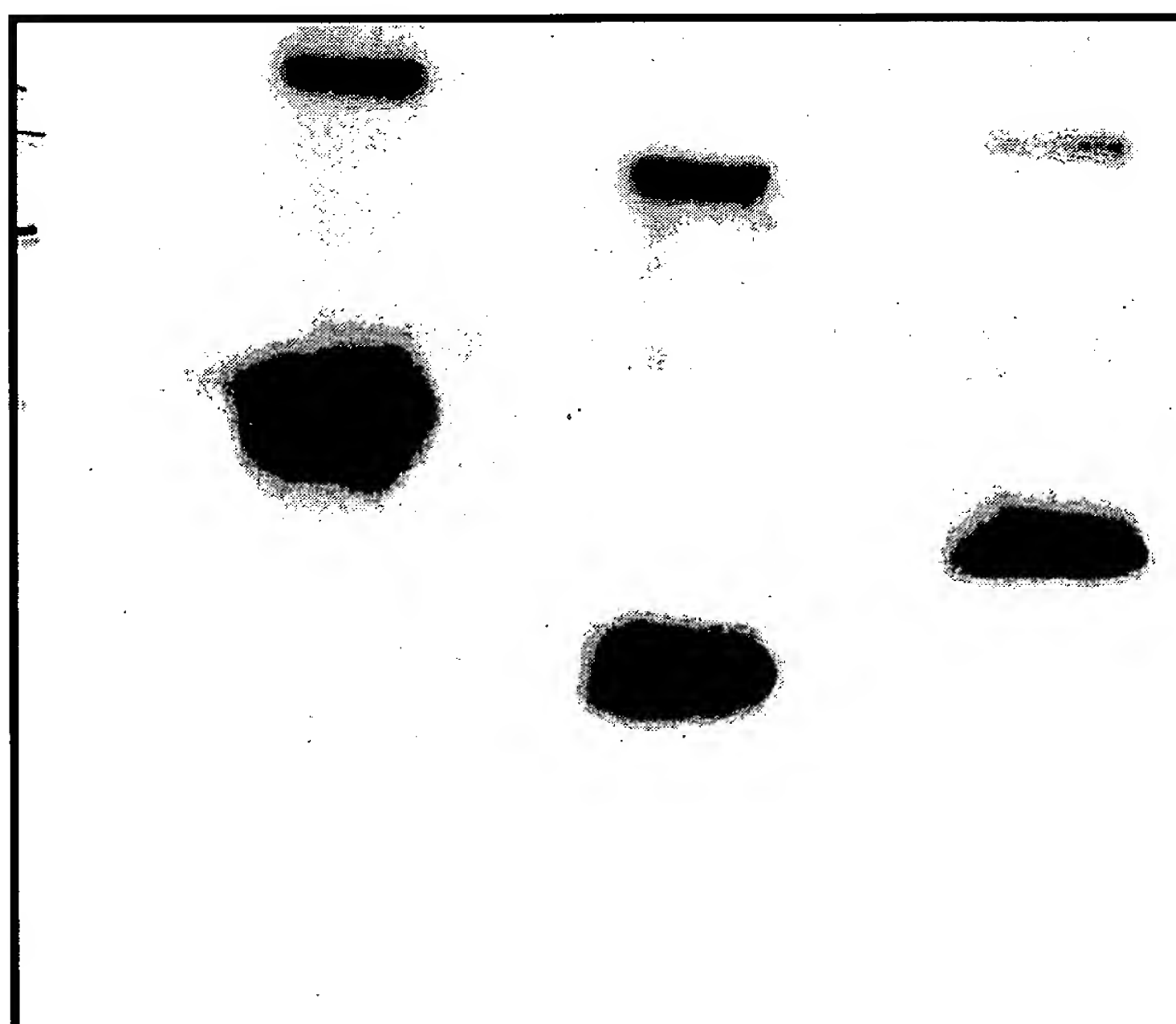


Kinase assay

B

IP:

F-TRADE $\beta$		F-TRADE <sup>1-328</sup>		F-TRADE <sup>1-368</sup>	
C	F	C	F	C	F



anti-Flag blot

FIGURE 11

A

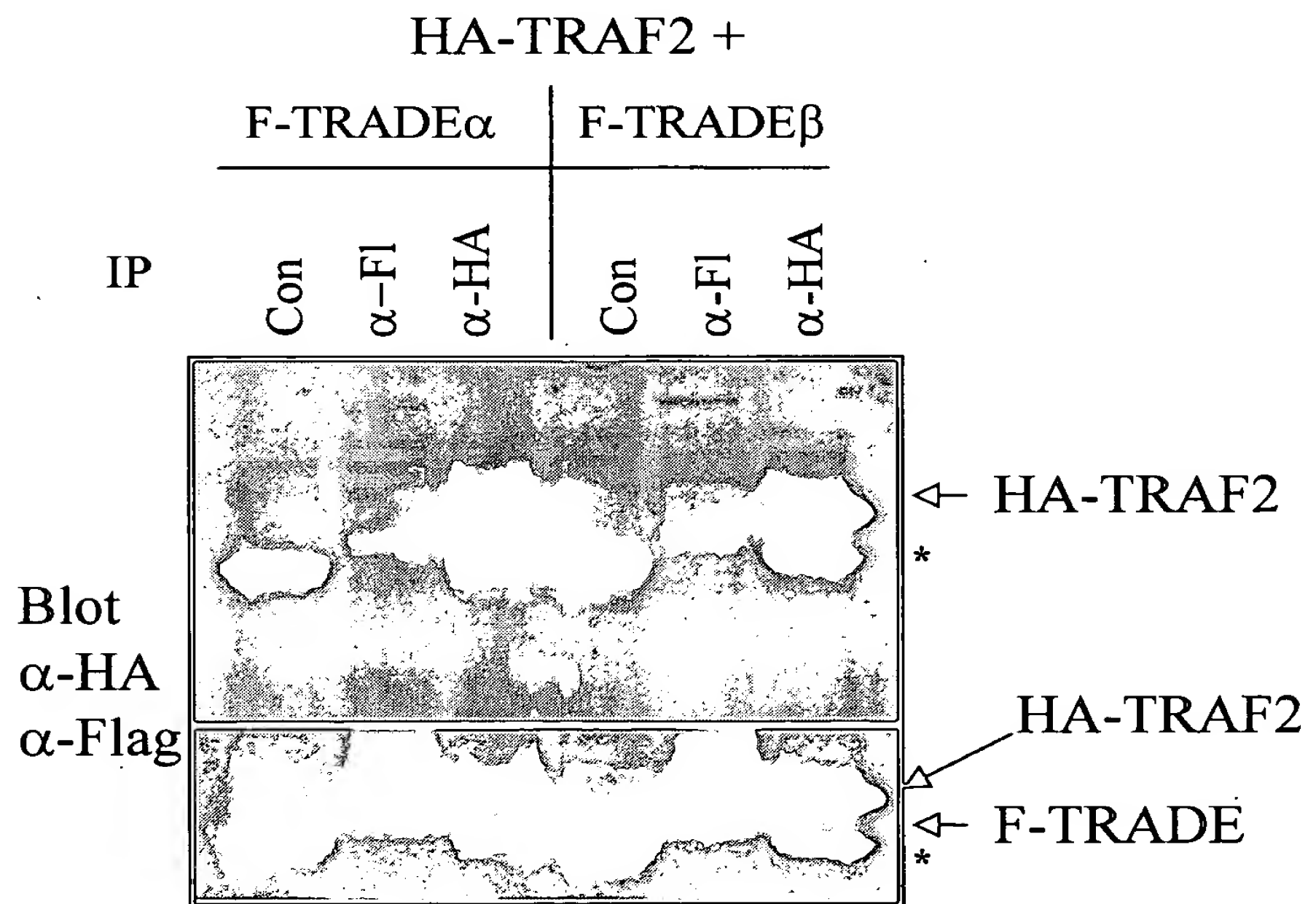
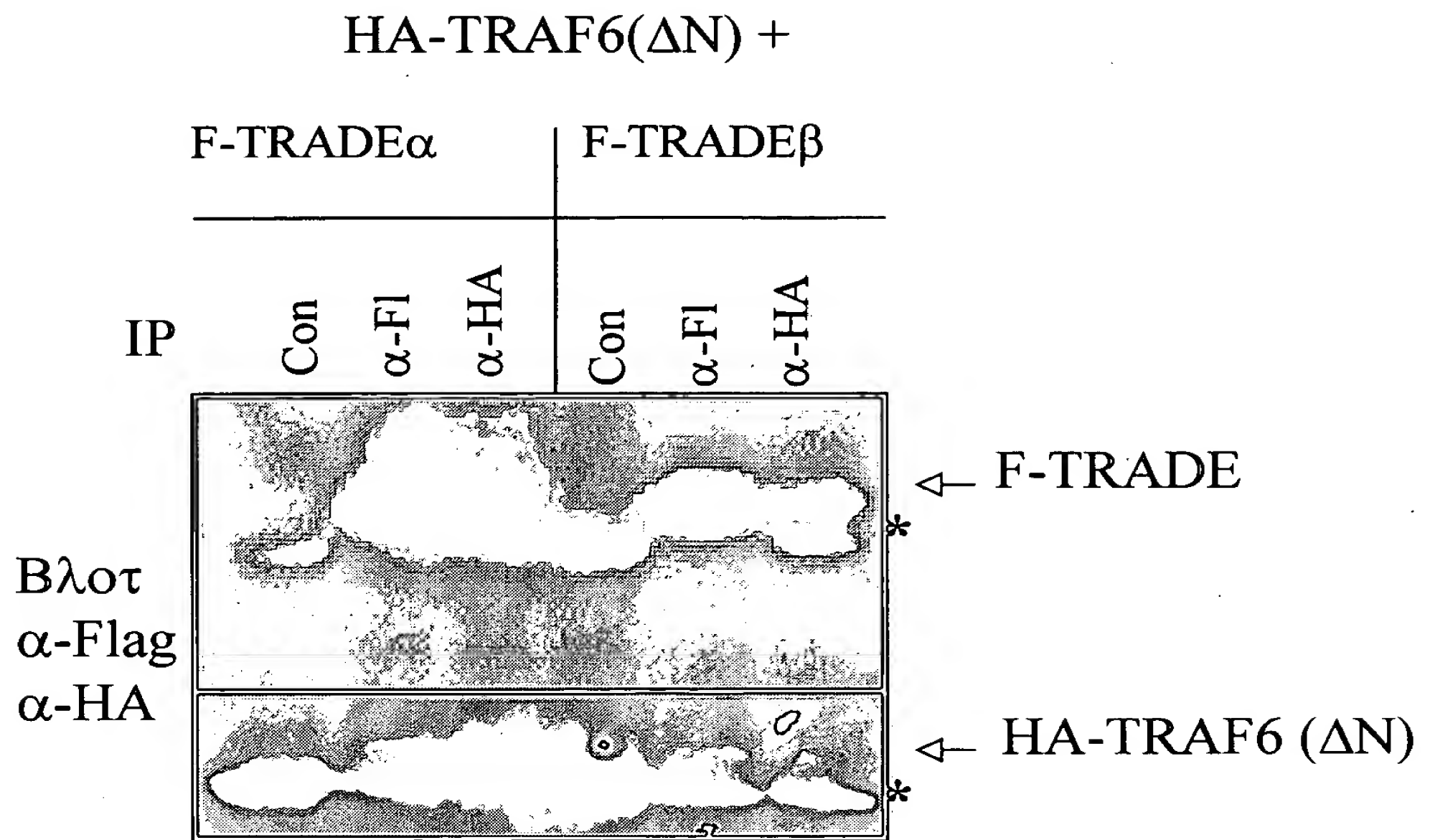


FIGURE 12







# NFkB luciferase activity

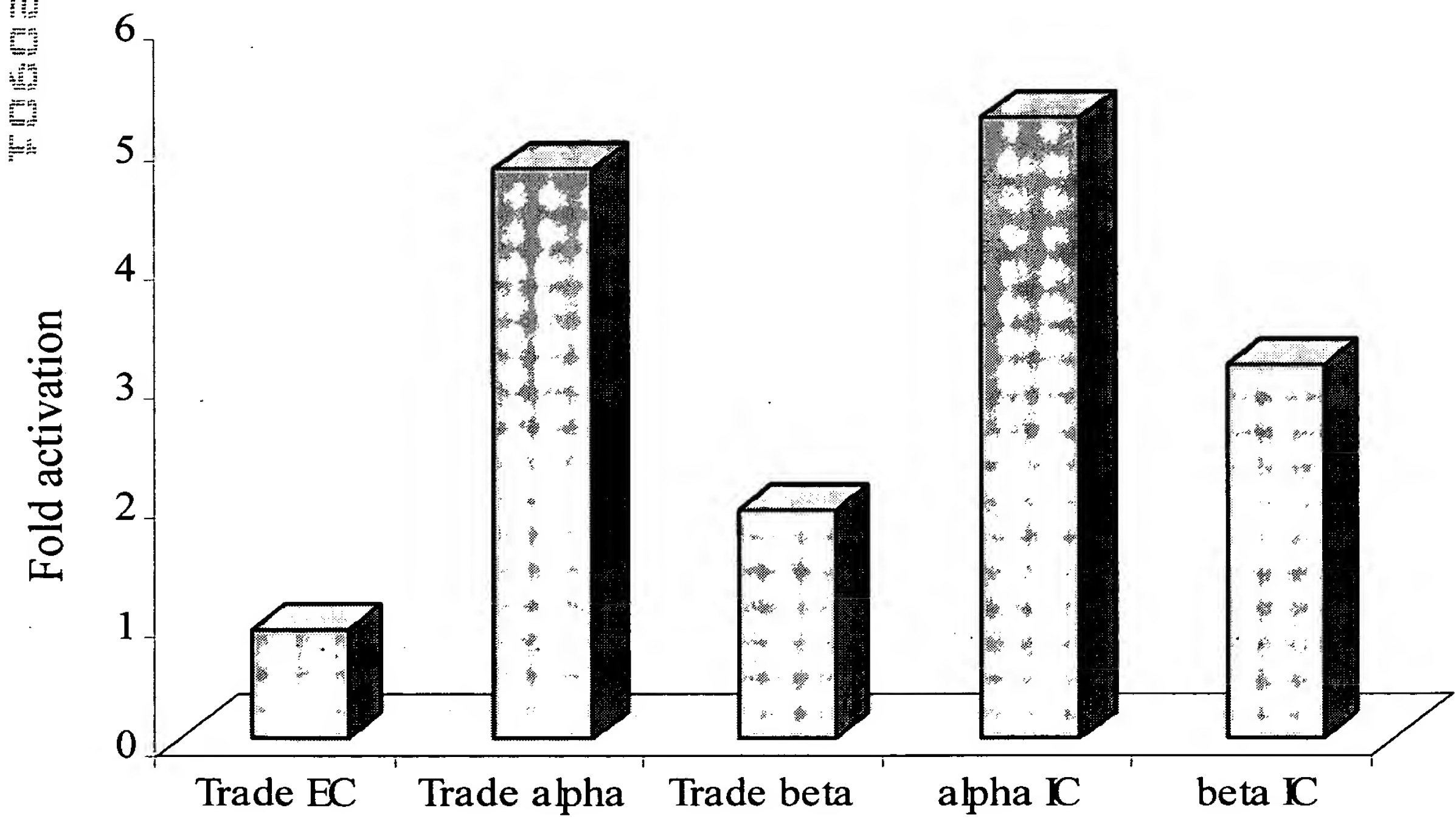
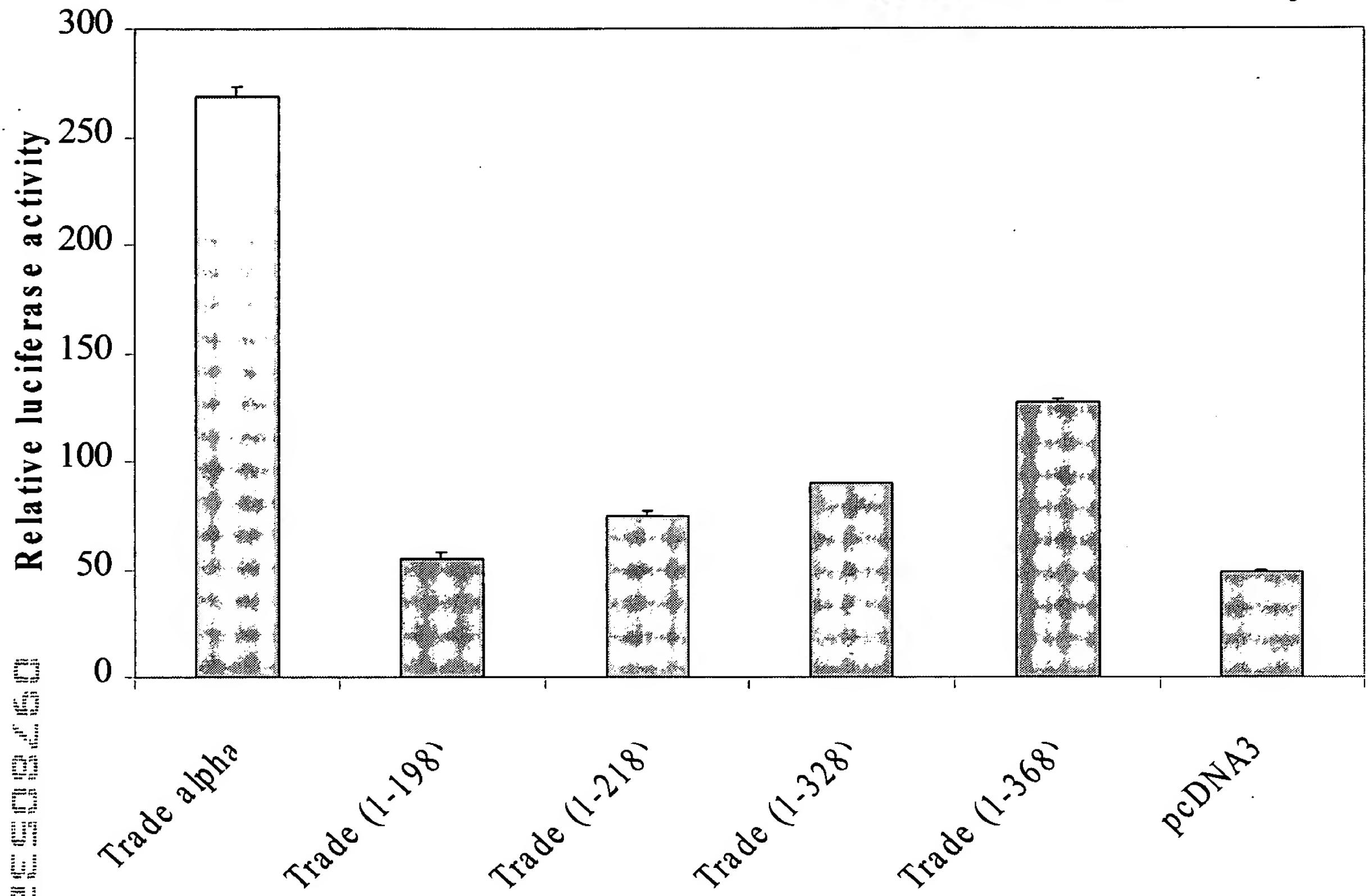


FIGURE 14